## PATENT SPECIFICATION

1 554 241 (11)

(21) Application No. 10726/76 (22) Filed 17 Mar. 1976 (23) Complete Specification Filed 17 Mar. 1977

(44) Complete Specification Published 17 Oct. 1979

(51) INT. CL.<sup>2</sup> A47G 19/23

(52) Index at Acceptance

A4A 1B2 1B4A 1C1 2B 6D

(72) Inventor: RONALD KELLY



## (54) DRINKING CUP

We, MONO CONTAINERS LI-MITED, a Company registered under the Laws of England, of Malt House, Field End Road, Eastcote, Ruislip, Middlesex, do hereby declare this invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particular described in and by the fol-

lowing statement.

This invention relates to a drinking cup for example a throw-away cup, possibly vacuum formed from sheet polystyrene material suitable for containing a measured amount of an ingredient for subsequently forming a drink by the addition of hot water. It is possible to have a stack of similar cups each with its measured amount of ingredient so that when one cup is released from the stack, it is only necessary to add the water to provide the drink.

An object of the invention is to provide a latching device for retaining a nested pair of cups retained together against light axial separating loads whereby the ingredient in the lower cup can be retained against spillage and possibly also in a space sealed from

the external atmosphere.

According to the invention, a drinking cup comprises a bottom and a side wall each of double-walled construction, the lower edge of the side wall projecting radially outwards, and the side wall being provided with a radial recess capable of resilient engagement by the projecting edge of a similar cup nested in the said cup to hold the cups engaged against light axial separating forces.

There may be a stacking surface provided for defining the ingredient space, and the co-operating stacking surfaces on the two cups can be arranged to be sealed together

when the latch is engaged.

35

It is desirable to provide the cup with a wall with adequate insulation to enable the user to hold the cup comfortably even when it has a hot drink in it. The double-walled construction may be enough for this purpose if the cup is manufactured from a sheet material like high impact polystyrene. However, it is also possible to make the cup from a material having better insulating properties, for example foam polystyrene.

The invention may be carried into practice in various ways and certain embodiments will now be described by way of example with reference to the accompanying

drawing of which;

Figure 1 shows a nested pair of doublewalled drinking cups embodying the inven-

Figure 1 shows a nested pair of doublewalled cups each having a plain generally frusto-conical outer side wall component 11, and inner side wall component 12.

There is an external projection 23 at the foot of the side wall of the outer component, and a corresponding latching recess 24 in the side wall of the inner component at the top of a cylindrical portion 25 which defines a

stacking and sealing shoulder.

When a similar cup shown in dashed lines is nested in the cup described, the projection 23 resiliently engages with the recess 24 in the inner of the lower cup and holds the two cups latched together against light axial separating loads. The cups are approximately sealed together and stacked one on the other where the projection and latch engage, and a space 26 is left for the powered coffee or other ingredient to be used for forming a drink. When the drink is to be made the lower cup is pulled from the stack and merely filled with hot water. The resilience of the walls allows deformation to engage the latch and release it again when a cup is to be pulled from the stack.

WHAT WE CLAIM IS:-

A drinking cup comprising a bottom and a side wall each of double-walled construction, the lower edge of the side wall projecting radially outwards, and the side 90

75

85

10

20

25

wall being provided with a radial recess capable of resilient engagement by the projecting edge of a similar cup nested in the said cup to hold the cups engaged against light axial separating forces.

2. A cup as claimed in Claim 1 in which the recess is spaced above the projecting edge to define a space between the bottoms of the two cups for an ingredient for making

a drink.

3. A cup as claimed in Claim 2 in which a pair of circumferentially continuous surfaces on the two cups come together when the cups are held engaged to seal the ingredient space from the surrounding atmosphere.

4. A cup as claimed in any of the preceding claims formed by an inner component and an outer component, each formed from sheet material.

5. A cup as claimed in Claim 4 in which the edge and the recess are respectively on the outer and inner components of the cup.

6. A cup as claimed in any of the preceding claims formed from foamed plastics

material.

7. A drinking cup constructed and arranged substantially as herein specifically described with reference to the single figure of the accompanying drawing

of the accompanying drawing.
8. A stack of at least two similar cups, each as claimed in any preceding claim with an ingredient for making a drink in the/or each space between a pair of nested cups.

KILBURN & STRODE

Chartered Patent Agents, Agents for the Applicants.

30

35

1554241

COMPLETE SPECIFICATION

1 SHEET

This drawing is a reproduction of the Original on a reduced scale

